

## CLAIMS

1. A honeycomb filter for purifying exhaust gases which has a structure in which:
  - 5 a plurality of a columnar porous ceramic member are combined with one another through adhesive layer, each of said columnar porous ceramic member comprising a number of through holes that are placed in parallel with one another in the length direction with partition wall interposed therebetween
  - 10 such that  
said partition wall which separates said through holes functions as a filter for collecting particulates  
wherein  
the relationship between a thermal expansion coefficient
  - 15  $\alpha_L$  of said adhesive layer and a thermal expansion coefficient  $\alpha_F$  of said porous ceramic member is as follows:  
$$0.01 < |\alpha_L - \alpha_F| / \alpha_F < 1.0.$$
2. A honeycomb filter for purifying exhaust gases which has a structure in which:
  - 20 a plurality of a columnar porous ceramic member are combined with one another through adhesive layer,  
each of said columnar porous ceramic member comprising a number of through holes that are placed in parallel with one
  - 25 another in the length direction  
while partition wall interposed therebetween  
such that  
said partition wall which separates said through holes functions as a filter for collecting particulates
  - 30 wherein  
Young's modulus of said adhesive layer is set to 60% or less of Young's modulus of said porous ceramic member, and  
the relationship between a thermal expansion coefficient
  - 35  $\alpha_L$  of said adhesive layer and a thermal expansion coefficient  $\alpha_F$  of said porous ceramic member is as follows:

$$0.01 < (\alpha_L - \alpha_F) / \alpha_F < 1.0.$$

3. The honeycomb filter for purifying exhaust gases according to claim 1 or 2, further comprising  
5 a catalyst supported thereon.